

Memo

Execution of runs outside GUI - exeparfile

1 Description

This tool (*exeparfile.exe*) allows running MACRO simulations from a MACRO parameter file outside of the various graphical user interfaces available. The parameter file may be created by either MACROinFOCUS or MACRO 5.2.

2 Input

The tool takes a MACRO parameter file name as input. The MACRO parameter file should be placed in the program directory.

3 Required files

The following files should be present in the program directory:

macro5.dll

MACRO52model.exe

In addition to these files, the driving data files specified in the parameter file needs to be accessible.

4 Output

The program creates a MACRO input file (indump.tmp) and launches a simulation (MACRO52model.exe), which in turn creates a MACRO output file (.bin file). If an error occurs, a text file is created in the program directory.

5 Syntax

exeparfile.exe Filename

Filename Parameter file name, including the file extension

6 Test procedure

1. Create a scenario in MACROinFOCUS
2. Export scenario simulation to parameter file
3. Run the scenario simulation in MACROinFOCUS
4. Run the MACRO parameter file using this tool
5. Look at the results in MACROinFOCUS by selecting the different log files in the results screen. The results should be identical

6.1 Test results

Tests have been performed for both surface and groundwater scenarios.

6.1.1 Groundwater

The following groundwater scenario was run both in MACROinFOCUS 5.5.3 (submitted) and by using the exeparfile program:

Compound : GW-A

Scenario : Chateaudun

Crop : Cereals, winter

Number of applications : 1

Application 1 : 1000 g/ha of GW-A on day 299

Some of the results are presented below:

	MACROinFOCUS	Exeparfile
80th	3.54	3.54
Periods	11,9	11,9
Percolation first period	15.44	15.44
Dissipation first period	18.93	18.93

6.1.2 Surface water

The following surface water scenario was run both in MACROinFOCUS and by using the exeparfile program:

Compound : 1_sw

Scenario : D1

Crop : Cereals, spring

Method of application : Ground spray

Number of applications : 1

Application 1 : 1000 g/ha of 1_sw on day 115

Some of the results are presented below:

	MACROinFOCUS	Exeparfile
Max conc	1860	1860
Lost to drains	3.44	3.44
Dissipated	93.62	93.62
Crop uptake	1.13	1.13